- 4. (Original) The polypeptide of claim 1, wherein the wild type ricin A chain first globular domain sequence is SEQ ID NO:2 or a variant thereof.
- 5. (Original) The polypeptide of claim 1, wherein the polypeptide sequence comprises SEQ ID NO:3, SEQ ID NO:4, or a variant thereof.
- 6. (Original) The polypeptide of claim 1, wherein the polypeptide sequence is substantially identical to SEQ ID NO:3 or SEQ ID NO:4.
- 7. (Original) The polypeptide of claim 1, wherein the polypeptide sequence lacks a hydrophobic loop that corresponds to the hydrophobic loop of wild type ricin A chain.
- 8. (Original) The polypeptide of claim 1, wherein the polypeptide sequence comprises at least one amino acid mutation, substitution, deletion, or a combination thereof, when compared to an amino acid sequence of ricin.
- 9. (Original) The polypeptide of claim 1, made by recombinant DNA techniques.
- 10. (Original) The polypeptide of claim 1, made by proteolytically cleaving the first globular domain and the second globular domain of ricin A chain and then purifying the first globular domain.
- 11-13. (Cancel).
- 14. (Original) A pharmaceutical composition comprising at least one polypeptide or variant of claim 1 in an immunogenic amount and a pharmaceutically acceptable vehicle.
- 15. (Original) The pharmaceutical composition of claim 14, and further comprising an adjuvant.
- 16. (Original) The pharmaceutical composition of claim 14, wherein the composition is capable of eliciting an immune response when administered to a subject.
- 17. (Original) The pharmaceutical composition of claim 16, wherein the immune response is a protective immune response.



18. (Currently amended) A pharmaceutical composition comprising at least one antibody [of claim 12] raised against the polypeptide or variant of claim 1 in a therapeutically effective amount and a pharmaceutically acceptable vehicle.

19-23. (Cancel).

- 24. (Original) A kit comprising at least one of the following
- (a) an isolated polypeptide or variant thereof comprising a polypeptide sequence having substantial identity to a wild type ricin A chain first globular domain sequence and lacks detectable N-glycosidase-rRNA activity or exhibits reduced N-glycosidase-rRNA activity as compared to a control;
 - (b) an antibody raised against the isolated polypeptide or variant of (a);
- (c) a pharmaceutical composition comprising at least one polypeptide or variant of (a) in an immunogenic amount and a pharmaceutically acceptable vehicle; and
- (d) a vaccine comprising an immunogenic amount of at least one polypeptide or variant of (a);

packaged together with instructions for use.

